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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dz Ching Ju et al. Examiner: Ted T. Vo
Serial No.: Group Art Unit: 2762
Filed: Docket: ST9-95-010US2
Title: METHOD OF, SYSTEM FOR, AND COMPUTER PROGRAM PRODUCT
FOR PROVIDING EFFICIENT UTILIZATION OF MEMORY HIERARCHY
THROUGH CODE RESTRUCTURING

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'Express Mail' mailing label number: EL540750213US

Date of Deposit: October 10, 2000

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By:

Name: Isabell Ogata

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Prior to a first Office Action, please amend the above-identified application as follows:

IN THE CLAIMS

Please amend claims 1, 2, 3, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 17, and 18 as follows:

1. (AMENDED) A method of restructuring a program comprising basic blocks for execution by a processor having a memory hierarchy [comprising] comprised of a plurality of levels, the method comprising the steps of:

a) constructing a Program Execution Graph (PEG) corresponding to a first level of the memory hierarchy from control flow and frequency information from a profile of the program, the PEG comprising a weighted undirected graph comprising nodes and edges, each node representing a [the] basic block[s] , each [and] edge[s] representing a transfer of control between a pair[s] of the basic blocks, each of the nodes having a weight equal to the size of the basic block represented by the node, and each of the edges having a weight equal to a frequency of transition between a pair of basic blocks represented by a pair of nodes connected by the edge;